



OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

Oligo No.

Sequence & Modification

8 SEQ ID NO.: 8

SEQ ID NO.: 10 SEQ ID NO.: 9

SEQ ID NO.: 11

SEQ ID NO.: 12

SEQ ID NO.: 13

SEQ ID NO.: 14

5 **SEQ ID NO.: 15**

SEQ ID NO.: 16

16

SEQ ID NO.: 17

SEQ ID NO.: 18

SEQ ID NO.: 19 SEQ ID NO.: 20

20

6

2 SEQ ID NO.: 21

SEQ ID NO.: 22 SEQ ID NO.: 23

5'-CCTACTAG<u>CG</u>TTCTCATC-3' (133-1)

5'-CCTACTAGCXTTCTCATC-3' (139-2)

5'-CCTACTAXCGTTCTCATC-3' (133-2)

5'-CCTACTXGCGTTCTCATC-3' (139-3)

5'-CCTACXAGCGTTCTCATC-3' (133-3)

5'-CCTAXTAGCGTTCTCATC-3' (139-4)

5'-CCT**X**CTAG<u>CC</u>TTCTCATC-3' (145-10a) 5'-CCTXCTAGCGTTCTCATC-3' (133-4)

5'-CCTACTAGCGXTCTCATC-3' (133-5)

5'-CCTACTAGCGT**X**CTCATC-3' (139-7) 5'-CCTACTAGCGTTXTCATC-3' (133-6)

1',2'-Dideoxyribose

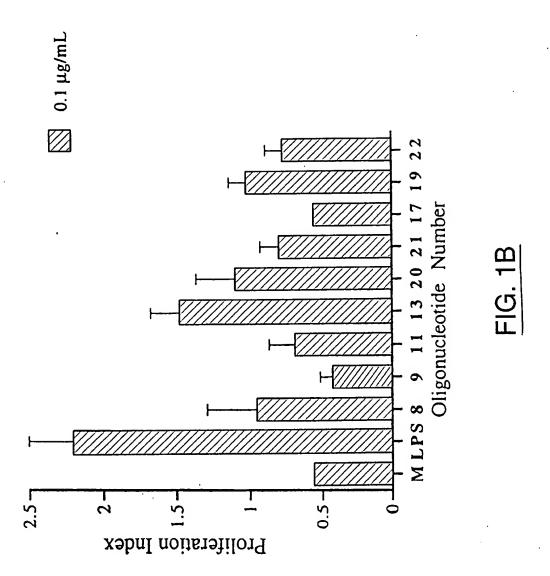
5'-CCTACTAGCGTTCXCATC-3' (139-8)

5'-CCTXXTAGCGTTCTCATC-3' (133-12) 5'-XXTACTAGCGTTCTCATC-3' (139-6)

5'-CCTACTAGCGTTCXXATC-3' (139-9)

5'-CCTXCTXGCGTTCTCATC-3' (145-10b) FIG. 1A

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Oligo No.

Sequence & Modification

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

SEQ ID NO.: 8 SEQ ID NO.: 9

SEQ ID NO.: 10

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SEQ ID NO.: 13

SEQ ID NO.: 14

SEQ ID NO.: 15

SEQ ID NO.: 16

SEQ ID NO.: 17

SEQ ID NO.: 18

SEQ ID NO.: 19

SEQ ID NO.: 20

21 **SEQ ID NO.: 21**

SEQ ID NO.: 22 SEQ ID NO.: 23

5'-CCTACTAG<u>CG</u>TTCTCATC-3' (133-1)

5'-CCTACTAGCXTTCTCATC-3' (139-2)

5'-CCTACTAXCGTTCTCATC-3' (133-2)

5'-CCTACT**X**GCGTTCTCATC-3' (139-3)

5'-CCTACXAGCGTTCTCATC-3' (133-3) 5'-CCTAXTAGCGTTCTCATC-3' (139-4)

5'-CCTXCTAG<u>CC</u>TTCTCATC-3' (145-10a) 5'-CCT**X**CTAGCGTTCTCATC-3' (133-4)

5'-CCTACTAGCGXTCTCATC-3' (133-5)

5'-CCTACTAGCGTXCTCATC-3' (139-7) 5'-CCTACTAGCGTTXTCATC-3' (133-6)

1',2'-Dideoxyribose

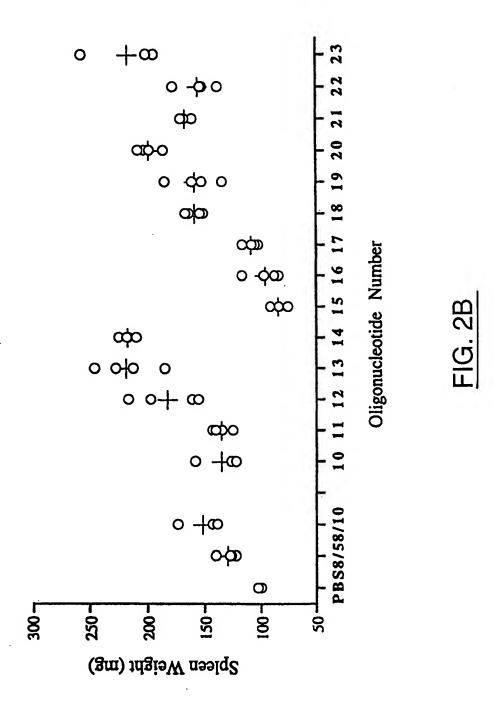
5'-CCTACTAGCGTTCXCATC-3' (139-8)

5'-CCTXXTAGCGTTCTCATC-3' (133-12) 5'-XXTACTAGCGTTCTCATC-3' (139-6)

5'-CCTACTAGCGTTCXXATC-3' (139-9)

5'-CCTXCTXGCGTTCTCATC-3' (145-10b)

FIG. 2A



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Sequence & Modification

SEQ ID NO.: 110

$$X = 3'$$

$$0 = 0$$

$$0 = 0$$

$$0 = 0$$
1',2'-Dideoxyribose

FIG. 3A

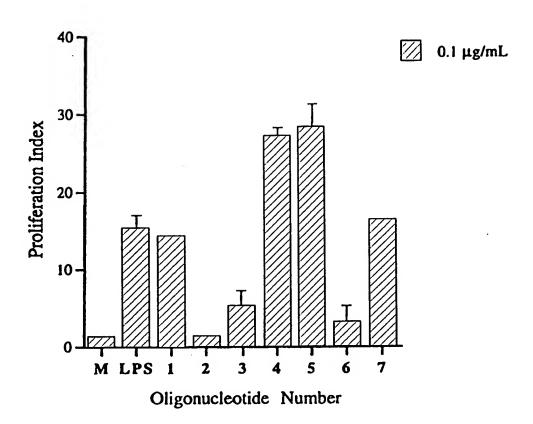


FIG. 3B

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

Oligo No.	Sequence & Modification	
SEQ ID NO.: 1	5'-CTATCTGA <u>CG</u> TTCTCTGT-3' (131-1)	
SEQ ID NO.: 105 2	5'-CTATCTGAXGTTCTCTGT-3' (131-13)	0-
SEQ ID NO.: 106 3	5'-CTATCTGXCGTTCTCTGT-3' (131-2)) }
SEQ ID NO.: 107 4	5'-CTATCXGACGTTCTCTGT-3' (131-3)	X = 3.
SEQ ID NO.: 108 5	5'-CTAXCTGACGTTCTCTGT-3' (131-4)	O-1
SEQ ID NO.: 109 6	5'-CTATCTGACGXTCTCTGT-3' (131-5)	0-4=0
SEQ ID NO.: 110 7	5'-CTATCTGACGTTXTCTGT-3' (131-6)	So So

FIG. 4A

1',2'-Dideoxyribose

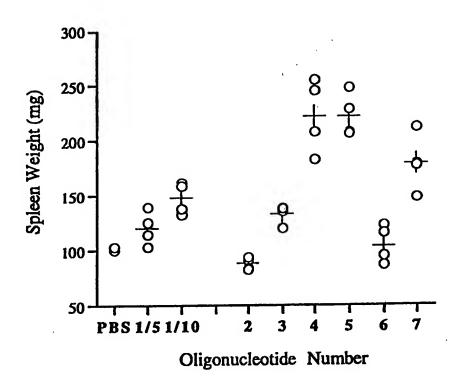
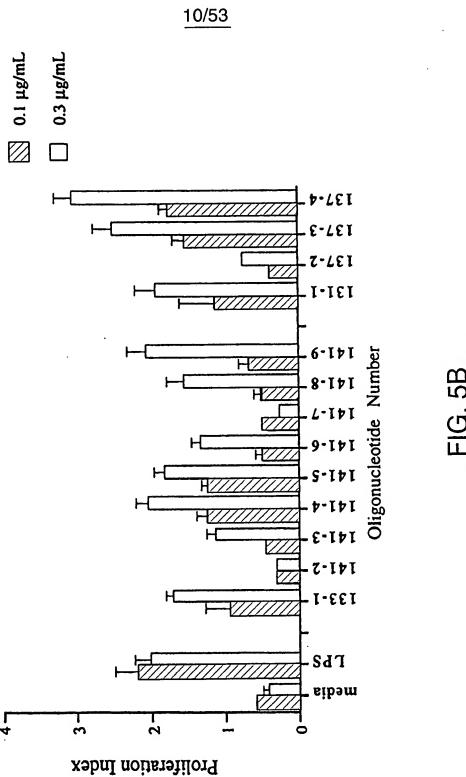


FIG. 4B

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0	Oligo No.	Sequence & Modification	
SEQ ID NO.: 8	133-1	5'-CCTACTAGCGTTCTCATC-3'	
SEQ ID NO.: 24	141-2	5'-CCTACTAGCXTTCTCATC-3'	
SEQ ID NO.: 25	141-3	5'-CCTACTXGCGTTCTCATC-3'	,º
SEQ ID NO.: 26	141-4	5'-CCTAXTAGCGTTCTCATC-3'	
SEQ ID NO.: 27	141-5	5'-CCTXXTAGCGTTCTCATC-3'	<i></i>
SEQ ID NO.: 28	141-6	5'-XXTACTAGCGTTCTCATC-3'	
SEQ ID NO.: 29	141-7	5'-CCTACTAGCGTXCTCATC-3'	· ,0·
SEQ ID NO.: 30	141-8	5'-CCTACTAGCGTTCXCATC-3'	0-Å-0
SEQ ID NO.: 31	141-9	5'-CCTACTAGCGTTCXXATC-3'	
SEQ ID NO.: 1	131-1	5'-CTATCTGACGTTCTCTGT-3'	C3-LINKer
SEQ ID NO.: 32	137-2	5'-CTATCTGXCGTTCTCTGT-3'	
SEQ ID NO.: 33	137-3	5'-CTATCXGACGTTCTCTGT-3'	
SEQ ID NO.: 34	137-4	5'-CTAXCTGACGTTCTCTGT-3'	

FIG. 5A



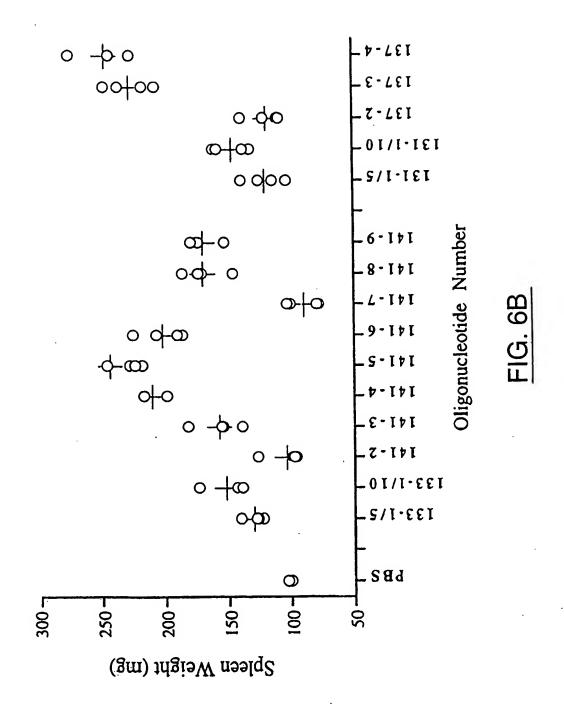
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Ö	Oligo No.	Sequence & Modification
SEQ ID NO.: 8	133-1	5'-CCTACTAGCGTTCTCATC-3'
SEQ ID NO.: 24	141-2	5'-CCTACTAGCXTTCTCATC-3'
SEQ ID NO.: 25	141-3	5'-CCTACTXGCGTTCTCATC-3'
SEQ ID NO.: 26	141-4	5'-CCTAXTAGCGTTCTCATC-3'
SEO ID NO: 27	141-5	5'-CCTXXTAGCGTTCTCATC-3'
SEQ ID NO.: 28	141-6	6-xxTACTAGCGTTCTCATC-3'
SEQ ID NO.: 29	141-7	5'-CCTACTAGCGTXCTCATC-3'
SEO ID NO: 30	141-8	5'-CCTACTAGCGTTCXCATC-3' O=P'-O
SEQ ID NO.: 31	141-9	5'-CCTACTAGCGTTCXXATC-3'
SEO ID NO · 1	131-1	6'-CTATCTGACGTTCTCTGT-3'
SEQ ID NO.: 32	137-2	5'-CTATCTGXCGTTCTCTGT-3'
SEQ ID NO.: 33	137-3	5'-CTATCXGACGTTCTCTGT-3'
SEQ ID NO.: 34	137-4	5'-CTAXCTGACGTTCTCTGT-3'

FIG. 6A

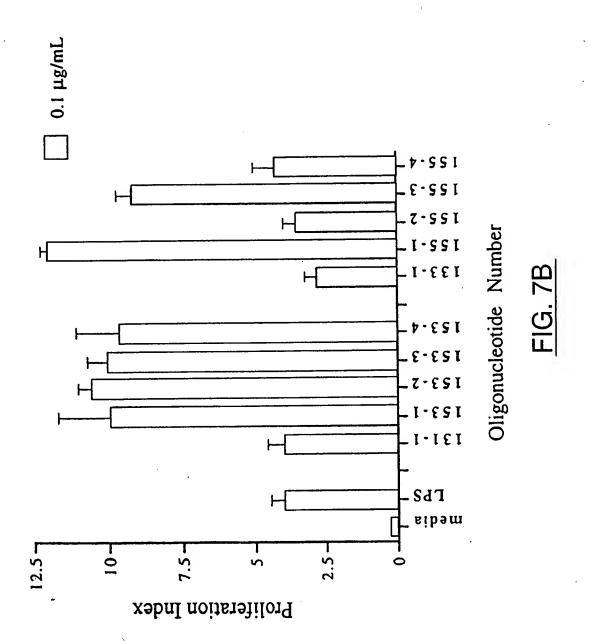
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0	Oligo No.	Sequence & Modification
SEQ ID NO.: 1		5'-CTATCTGA <u>CG</u> TTCTCTGT-3' (131-1)
SEQ ID NO.: 35	7	5'-CTAXCTGACGTTCTCTGT-3' (153-1)
SEQ ID NO.: 36	က	5'-CTATCTGACGTTCXCTGT-3' (153-2)
SEQ ID NO.: 37	4	5'-CTAYCTGACGTTCTCTGT-3' (153-3)
SEQ ID NO.: 38	2	5'-CTATCTGACGTTCYCTGT-3' (153-4)
SEQ ID NO.: 8	9	5'-CCTACTAGCGTTCTCATC-3' (133-1)
SEQ ID NO.: 39	2	5'-CCTXCTAGCGTTCTCATC-3' (155-1)
SEQ ID NO.: 40	œ	5'-CCTACTAGCGTTCXCATC-3' (155-2)
SEQ ID NO.: 41	თ	5'-CCTYCTAGCGTTCTCATC-3' (155-3)
SEQ ID NO.: 42	10	5'-CCTACTAGCGTTCYCATC-3' (155-4)
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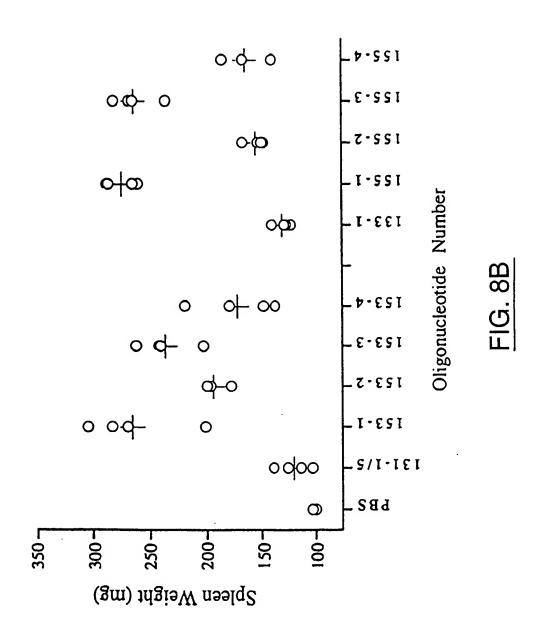
$$X = \frac{1}{2} \times \frac{0}{2} \times$$



0	Oligo No.	Sequence & Modification
SEQ ID NO.: 1	-	5'-CTATCTGA <u>CG</u> TTCTCTGT-3' (131-1)
SEQ ID NO.: 35		5'-CTAXCTGACGTTCTCTGT-3' (153-1)
SEQ ID NO.: 36	က	5'-CTATCTGACGTTCXCTGT-3' (153-2)
SEQ ID NO.: 37	4	5'-CTAYCTGACGTTCTCTGT-3' (153-3)
SEQ ID NO.: 38	2	5'-CTATCTGACGTTCYCTGT-3' (153-4)
SEQ ID NO.: 8	9	5'-CCTACTAGCGTTCTCATC-3' (133-1)
SEQ ID NO.: 39	7	5'-CCTXCTAGCGTTCTCATC-3' (155-1)
SEQ ID NO.: 40	80	5'-CCTACTAGCGTTCXCATC-3' (155-2)
SEQ ID NO.: 41	6	5'-CCTYCTAGCGTTCTCATC-3' (155-3)
SEQ ID NO.: 42	10	5'-CCTACTAGCGTTCYCATC-3' (155-4)

$$X = Y_{0} - Y_{0} - Y_{0}$$

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$$Y = Y_{0} - Y_{0} - Y_{0} - Y_{0}$$
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$$FIG. 8A$$



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5'-CTATCTGACGTTCTCTGT-3' (131-1)
5'-CTATCTGXCGTTCTCTGT-3' (157-1)
5'-CTATCTXACGTTCTCTGT-3' (157-2)
5'-CTAXCTGACGTTCTCTGT-3' (157-3)
5'-CTATCTGACGTXCTCTGT-3' (157-4)

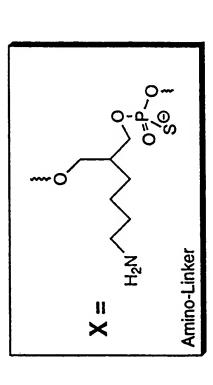
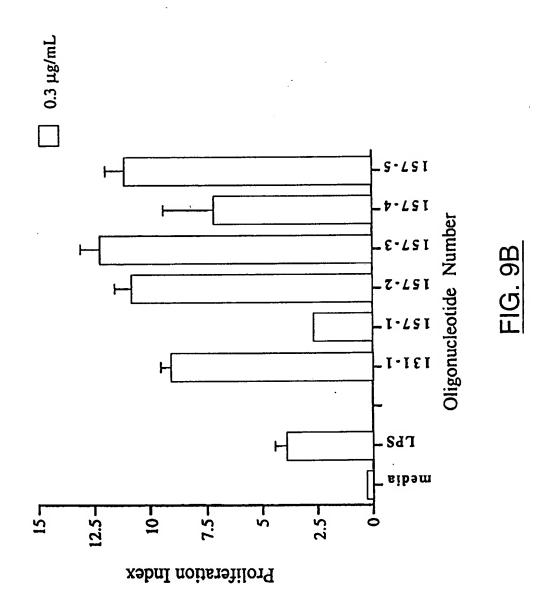


FIG. 9A



Oligo No.

Sequence & Modification

SEQ ID NO.: 1 1

SEQ ID NO.: 43 2

SEQ ID NO.: 44 3

SEQ ID NO.: 44 3

SEQ ID NO.: 46 5

5'-CTATCTGACGTTCTCTGT-3' (131-1)

5'-CTATCTGXCGTTCTCTGT-3' (157-1)

5'-CTATCTXACGTTCTCTGT-3' (157-2) 5'-CTAXCTGACGTTCTCTGT-3' (157-3) 5'-CTATCTGACGTXCTCTGT-3' (157-4) 5'-CTATCTGACGTTCXCTGT-3' (157-5)

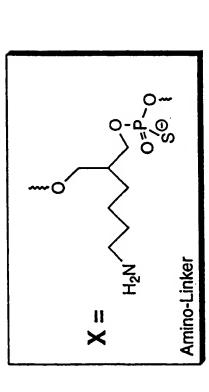
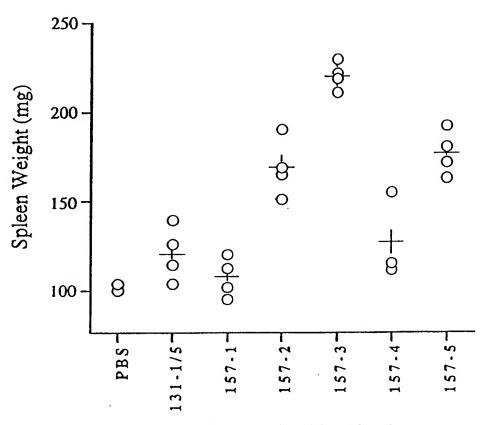


FIG. 10A

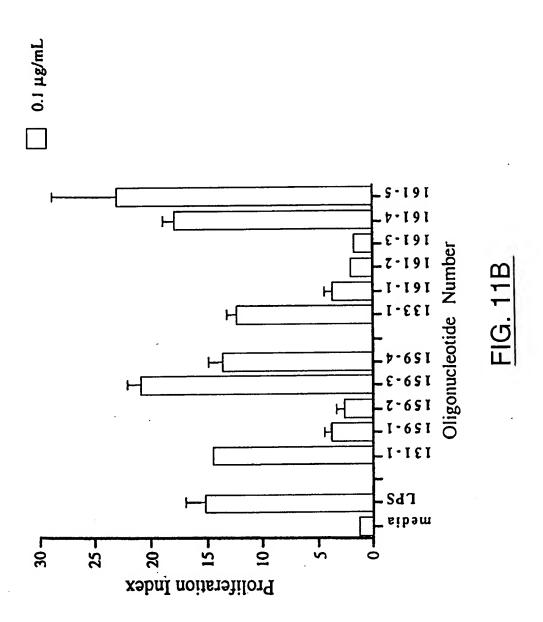


Oligonucleotide Number

FIG. 10B

Oligo No.	Sequence & Modification	
SEQ ID NO.: 1 131-1	5'-CTATCTGACGTTCTCTGT-3'	
SEQ ID NO.: 48 159-1	5'-CTATCTGACXTTCTCTGT-3'	0-
SEQ ID NO.: 49 159-2	5'-CTATCTGAXGTTCTCTGT-3'	X = 5' < 0 < B
SEQ ID NO.: 50 159-3	5'-CTATXTGACGTTCTCTGT-3'	
SEQ ID NO.: 51 159-4	5'-CTATCTGACGTTCTXTGT-3'	21/50 0-4=0
SEQ ID NO.: 8 133-1	5'-CCTACTAGCGTTCTCATC-3'	
SEQ ID NO.: 52 161-1	5'-CCTACTAGCXTTCTCATC-3'	
SEQ ID NO.: 53 161-2	5'-CCTACTAGXGTTCTCATC-3'	3'-Deoxynucleoside
SEQ ID NO.: 54 161-3	5'-CCTACTAXCGTTCTCATC-3'	
SEQ ID NO.: 55 161-4	5'-CCTAXTAGCGTTCTCATC-3'	
SEQ ID NO.: 56 161-5	5'-CCTACTAGCGTTCTXATC-3'	

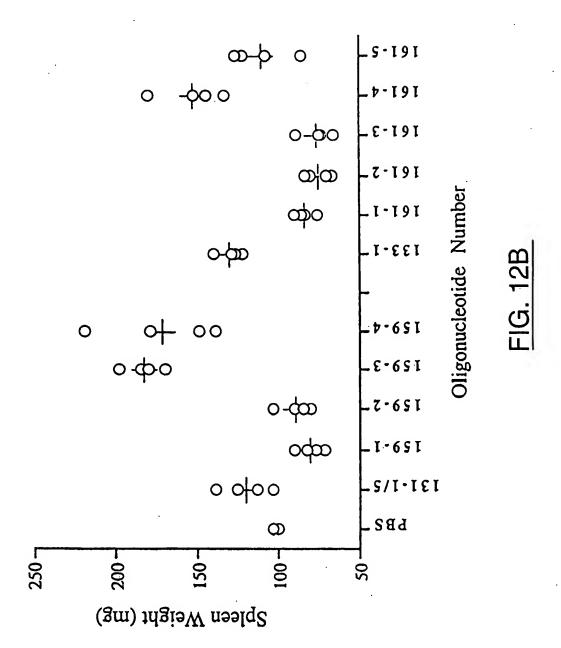
FIG. 11A



Oligo No.	Sequence & Modification	
SEQ ID NO.: 1 131-1	5'-CTATCTGACGTTCTCTGT-3'	
SEQ ID NO.: 48 159-1	5'-CTATCTGACXTTCTCTGT-3'	0-
SEQ ID NO.: 49 159-2	5'-CTATCTGAXGTTCTCTGT-3'	$X = 5. \langle 0 \rangle_{S} = X$
SEQ ID NO.: 50 159-3	5'-CTATXTGACGTTCTCTGT-3'	75
SEQ ID NO.: 51 159-4	5'-CTATCTGACGTTCTXTGT-3'	23/50
SEQ ID NO.: 8 133-1	5'-CCTACTAGCGTTCTCATC-3'	(5, 0 × B
SEQ ID NO.: 52 161-1	5'-CCTACTAGCXTTCTCATC-3'	
SEQ ID NO.: 53 161-2	5'-CCTACTAGXGTTCTCATC-3'	3'-Deoxynucleoside
SEQ ID NO.: 54 161-3	5'-CCTACTAXCGTTCTCATC-3'	
SEQ ID NO.: 55 161-4	5'-CCTAXTAGCGTTCTCATC-3'	
SEQ ID NO.: 56 161-5	5'-CCTACTAGCGTTCTXATC-3'	

FIG. 12A



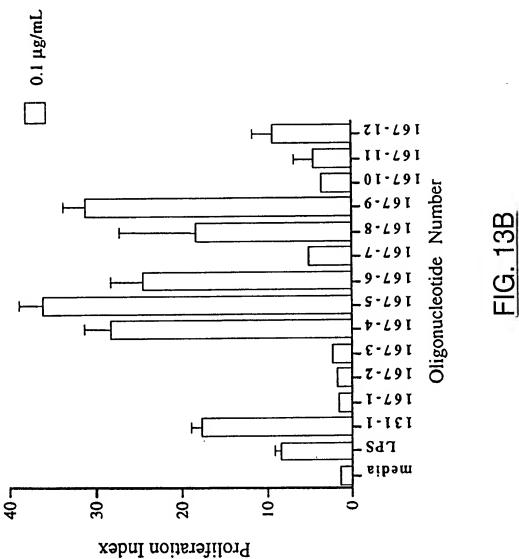


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SEQ ID NO.: 1	131-1	5'-CTATCTGACGTTCTCTGT-3'
SEQ ID NO.: 57	167-1	5'-CTATCTGXCGTTCTCTGT-3'
SEQ ID NO:: 58	167-2	S-ctatctxacgttctctgt-3' $X = 5$
SEQ ID NO.: 59	167-3	5'-CTATCXGACGTTCTCTGT-3'
SEQ ID NO.: 60	167-4	5'-CTATXTGACGTTCTCTGT-3'
SEQ ID NO.: 61	167-5	5'-CTAXCTGACGTTCTCTGT-3'
SEQ ID NO.: 62	167-6	5'-CTXXCTGACGTTCTCTGT-3'
SEQ ID NO.: 63	167-7	5'-CTATCTGACGXTCTCTGT-3'
SEQ ID NO.: 64	167-8	5'-CTATCTGACGTXCTCTGT-3'
SEQ ID NO.: 65	167-9	5'-CTATCTGACGTTXTCTGT-3'
SEQ ID NO.: 66	167-10	5'-CTATCTGACGTTCXCTGT-3'
SEQ ID NO.: 67	16711	5'-CTATCTGACGTTCTXTGT-3'
SEQ ID NO.: 68	167-12	5'-CTATCTGACGTTCTXXGT-3'

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Methyl-phosphonate

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5	Oligo No.	Sequence & Modification
SEQ ID NO.: 1	131-1	5'-CTATCTGACGTTCTCTGT-3
SEQ ID NO.: 57 167-1	167-1	5'-CTATCTGXCGTTCTCTGT-3
SEQ ID NO.: 58 167-2	167-2	5'-CTATCTXACGTTCTCTGT-3
SEQ ID NO.: 59 167-3	167-3	5'-CTATCXGACGTTCTCTGT-3
SEQ ID NO.: 60 167-4	167-4	5'-CTATXTGACGTTCTCTGT-3
SEQ ID NO.: 61 167-5	167-5	5'-CTAXCTGACGTTCTCTGT-3
SEQ ID NO.: 62 167-6	167-6	5'-CTXXCTGACGTTCTCTGT-3

X = 5',

5'-CTATCTGACGTTCTCTGT-3'	5'-CTATCTGXCGTTCTCTGT-3'	5'-CTATCTXACGTTCTCTGT-3'	5'-CTATCXGACGTTCTCTGT-3'	5'-CTATXTGACGTTCTCTGT-3'	5'-CTAXCTGACGTTCTCTGT-3'	5'-CTXXCTGACGTTCTCTGT-3'	5'-CTATCTGACGXTCTCTGT-3'	5'-CTATCTGACGTXCTCTGT-3'	5'-CTATCTGACGTTXTCTGT-3'	5'-CTATCTGACGTTCXCTGT-3'	5'-CTATCTGACGTTCTXTGT-3'	5'-CTATCTGACGTTCTXXGT-3'

SEQ ID NO.: 66 167-10

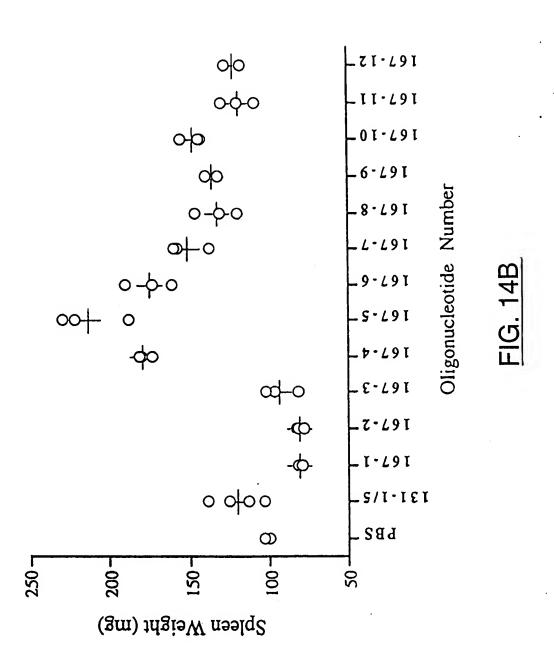
SEQ ID NO.: 64 167-8

SEQ ID NO.: 63 167-7

SEQ ID NO.: 65 167-9

SEQ ID NO.: 67 16711

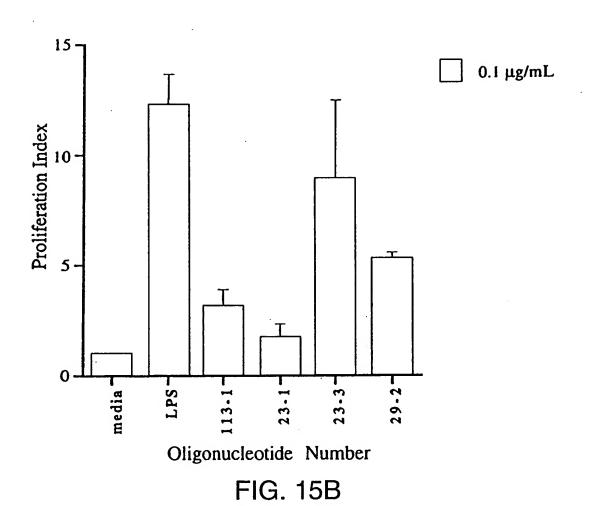
SEQ ID NO.: 68 167-12



Oligo No.	Oligo No. Sequence & Modification		1
SEQ ID NO.: 69 113-1	5'-TCCATGACGTTCCTGATGC-3'	0-	
SEQ ID NO.: 70 23-1	5'-TCCATGXCGTTCCTGATGC-3'	0 B	29/
SEQ ID NO.: 71 23-3	5'-TCCAXGACGTTCCTGATGC-3'	HO OH	<u>53</u>
SEQ ID NO.: 72 29-2	5'-TYYATGACGGTCCTGATGC-3'	0=P-0	
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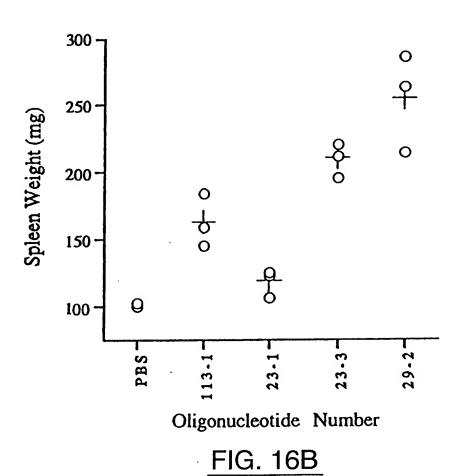
FIG. 15A

 $R_X = 2$ '-O-Methylribonucleoside Ry = 2'-O-Methoxyethoxyribonucleoside



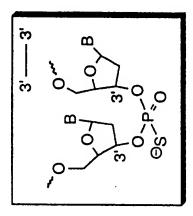
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FIG. 16A



OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND MODIFICATION OF LINKAGES

o	Oligo No.	Sequence & Modification
SEQ ID NO.: 73	-	5'-GAGAACGCTCGACCTT-3'
SEQ ID NO.: 74	8	5'-GAGAACGCTCGACCTT-3'5'-GAGAACGCTCGACCTT-3'
SEQ ID NO.: 75	က	3'-TTCCAGCTCGCAAGAG-5'5'-GAGAACGCTCGACCTT-3'
SEQ ID NO.: 76	4	5'-GAGAACGCTCGACCTT-3' 3'-TTCCAGCTCGCAAGAG-5'
SEQ ID NO.: 77	ហ	5'-T C T C C C A G C G T G C G C C A T-3'
SEQ ID NO.: 78	9	5-TCCCAGCGTGCGCCAT-3' 5'-TCCCAGCGTGCGCCAT-3'
SEQ ID NO.: 79	7	3-TACCGCGTGCGACCCT-5' 5'-TCCCAGCGTGCGCCAT-3'
SEQ ID NO.: 80	∞	5-TCCCAGCGTGCGCCAT-3' 3'-TACCGCGTGCGACCCT-5'



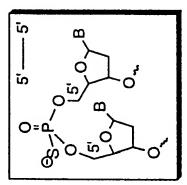
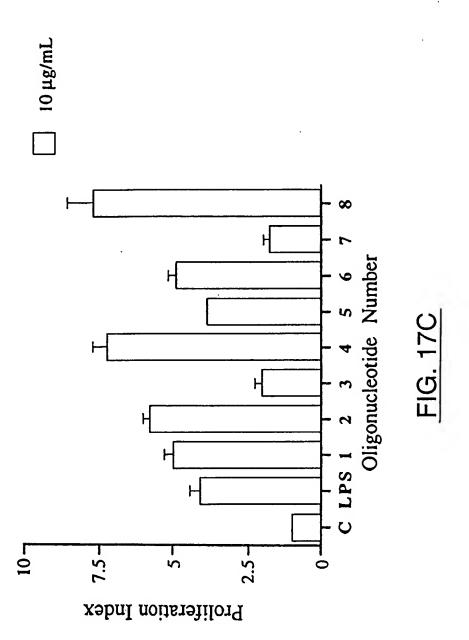


FIG. 17B





OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND MODIFICATION OF LINKAGES

	The second secon	The second secon
Oligo No.	Sequence & Modification	
SEQ ID NO.: 1 131-1	5'-CTATCTGACGTTCTCTGT-3'	
SEQ ID NO.: 81 175-1	5'-CTATXTGACGTTCTCTGT-3'	` O-
SEQ ID NO.: 82 175-2	5'-CTATCTGACGTTCXCTGT-3'	$X = \frac{B}{A}$
SEQ ID NO.: 83 175-3	5'-CTAXXTGACGTTCTCTGT-3'	
SEQ ID NO.: 84 175-4	5'-CTATCTGACGTTCXXTGT-3'	0= 4 =0
SEQ ID NO.: 85 175-5	5'-CTATCTGAXXTTCTCTGT-3'	SO (5' OVB
SEQ ID NO.: 86 175-6	5'-CTATCTXACGTTCTCTGT-3'	β -L-Deoxynucleoside 3'
SEQ ID NO.: 87 175-7	5'-CTATCTGACGTXCTCTGT-3'	, ,
SEQ ID NO.: 88 175-9	5'-CTATCTGACGTTCTCTGT-3' (all-β-L-DNA/PS)	L-DNA/PS)

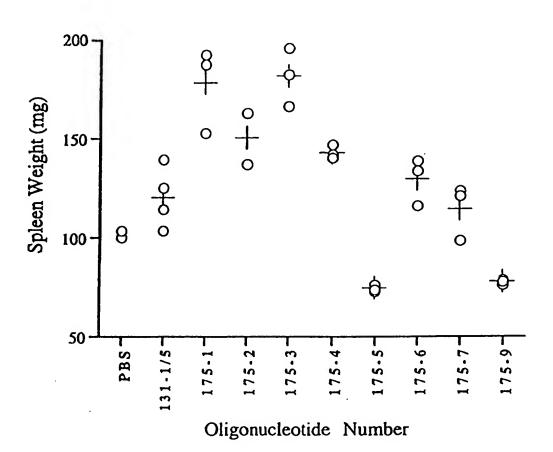


FIG. 18B

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND MODIFICATION OF LINKAGES

Sequence & Modification

SEQ ID NO.: 1 131-1

Oligo No.

SEQ ID NO.: 90 173-2 SEQ ID NO.: 89 173-1

5'-CTATCTGACGTTCTCTGT-3' 5'-CTATXTGACGTTCTCTGT-3'

5'-CTATCTGACGTTCTXTGT-3'

2'-O-Propargyl-ribonucleoside \.'S = X

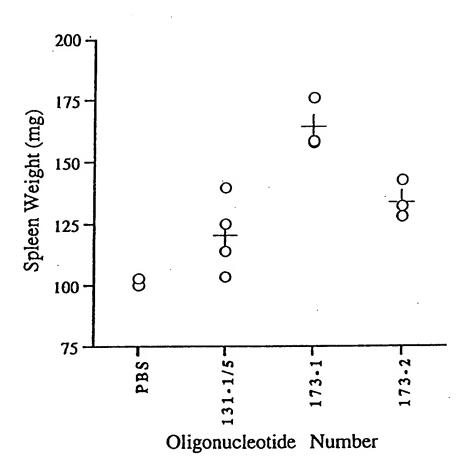
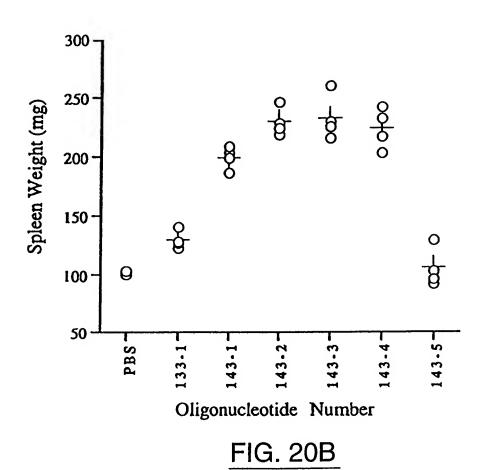


FIG. 19B

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND MODIFICATION OF LINKAGES

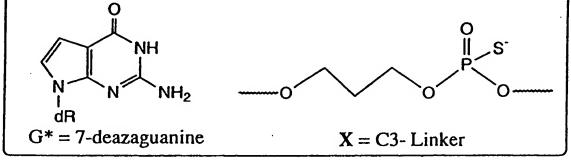
Ö	Oligo No.	Sequence & Modification
SEQ ID NO.: 8	133-1	5'-CCTACTAGCGTTCTCATC-3'
SEQ ID NO.: 91	143-1	5'-CCTXXTAGCGTTCTCATC-3'
SEQ ID NO.: 92	143-2	5'-CCTYYTAGCGTTCTCATC-3'
SEQ ID NO.: 93	143-3	5'-CCTZZTAGCGTTCTCATC-3'
SEQ ID NO.: 94	143-4	5'-CCTXXTAGCGTVCTCATC-3'
SEQ ID NO.: 95	143-5	5'-CCTACTAGGCTTCTCATC-3'

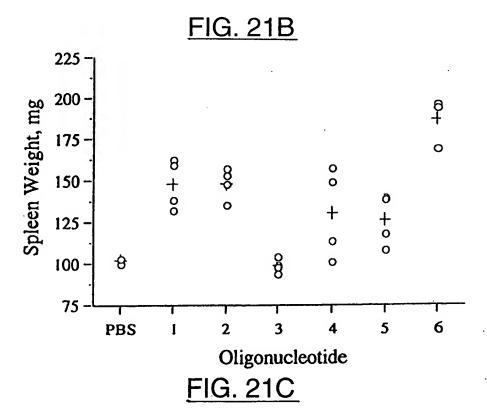
X =1',2'-Dideoxyribose Y = C3-Linker Z = 3'-OMe V = 2'-OMe



42/53
OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND MODIFICATION OF LINKAGES

Oligo No.	Sequence & Modification
SEQ ID NO.: 1 1 SEQ ID NO.: 96 2 SEQ ID NO.: 97 3 SEQ ID NO.: 98 4 SEQ ID NO.: 99 5 SEQ ID NO.: 100 6	5'-CTATCTGACGTTCTCTGT-3' (131-1) 5'-CTATCTGACG*TTCTCTGT-3' (E 633L) 5'-CTATCTGAG*CTTCTCTGT-3' (E 636) 5'-TCTCCCAGCGTGCGCCAT-3' 5'-TCTCCCAGCG*TGCG*CCAT-3' (E 603) 5'-CTATXTGACG*TTCTCTGT-3' (E 639L) FIG. 21A
NH	0





OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

Oligo No.

Sequence & Modification

SEQ ID NO.: 1

SEQ ID NO.: 101 2

SEQ ID NO.: 102 3

5'-CTATCTGA<u>CG</u>TTCTCTGT-3' (131-1) 5'-CTATCTGA<u>CG*</u>TTCTCTGT-3' (E 682)

5'-CTATCTGAG*CTTCTCTGT-3' (E 683)

FIG. 22A

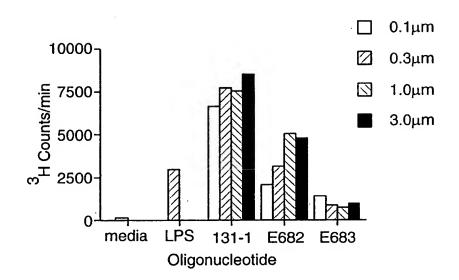


FIG. 22B

NH-CH₂-CH₃

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OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

A H

뜡

5'-CTATCTGACC**TTCTCTGT-3'

5'-CTATCTGAC**GTTCTCTGT-3'

SEQ ID NO.: 4

SEQ ID NO.: 5

S'-CTATCTGAC*GTTCTCTGT-3'

5'-CTATCTGACGTTCTCTGT-3'

SEQ ID NO.: 1

SEQ ID NO.: 2

Sequence & Modification

Oligo No.

5-CTATCTGACC*TTCTCTGT-3'

3

SEQ ID NO.: 3

C* = 5-hydroxy-cytosine C** = N4-ethyl-cytosine

FIG. 23A

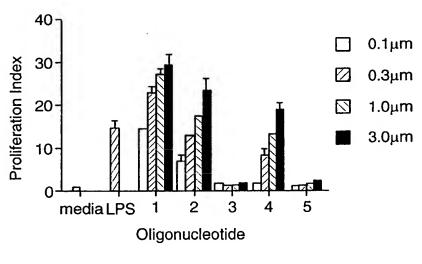


FIG. 23B

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

Oligo No. Sequence & Modification

SEQ ID NO.: 1 5'-CTATCTGACGTTCTCTGT-3'
SEQ ID NO.: 2 5'-CTATCTGAC*GTTCTCTGT-3'
SEQ ID NO.: 3 5'-CTATCTGACC*TTCTCTGT-3'
SEQ ID NO.: 4 5'-CTATCTGAC*TTCTCTGT-3'
SEQ ID NO.: 5 5'-CTATCTGAC**TTCTCTGT-3'

FIG. 24A

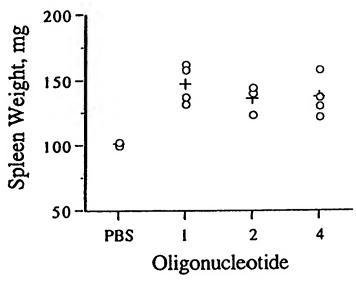


FIG. 24B

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

Sequence & Modification Oligo No. 5'-CTATCTGACGTTCTCTGT-3' **SEQ ID NO.: 111**

SEQ ID NO.: 1

5'-CTATCTGACC*TTCTCTGT-3' 5'-CTATCTGAC*GITCTCTGT-3'

SEQ ID NO.: 112

C* = Ara-C

FIG. 25A

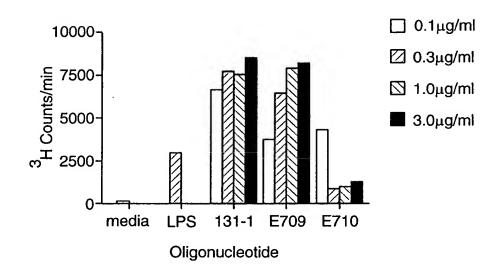


FIG. 25B

OLIGODEOXYNUCLEOTIDE PHOSPHOROTHIOATES AND SITE OF MODIFICATION

Oligo No. Sequence & Modification

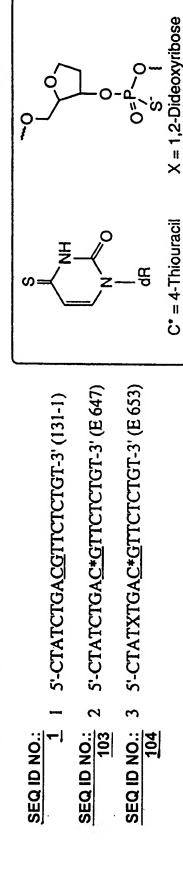
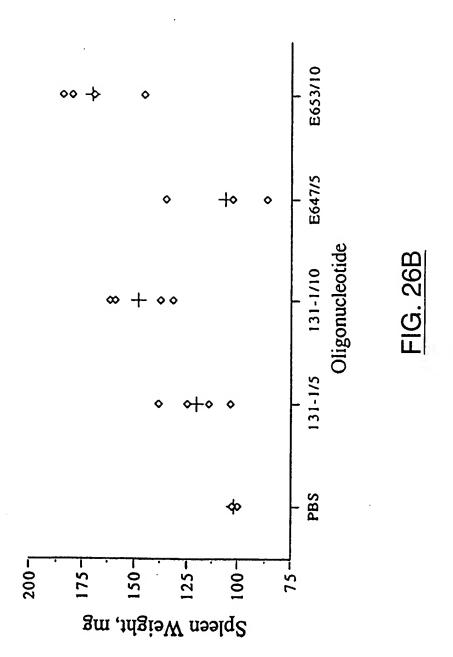


FIG. 26A





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